

What is claimed is:

1. A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a rear side of the panel,

wherein an aspect ratio of an effective surface (U) of the panel is 4:3, a diagonal size of the effective surface is 570mm ~ 700mm, and a following condition is satisfied:

$$-1.7168 \cdot \ln(U) + 11.627 \leq (R_h \cdot R_v \cdot R_o / U) \cdot T_c \leq -2.0131 \cdot \ln(U) + 13.645,$$

wherein a value obtained by dividing an inner curvature radius Rx of the effective surface of the panel following a long axis (X) by a distance Lx of the effective surface of the panel following a 1.767*long axis is Rh, a value obtained by dividing an inner curvature radius Ry of the effective surface of the panel following a short axis (Y) by a distance Ly of the effective surface following a 1.767*short axis is Rv, a value obtained by dividing an inner curvature radius of the effective surface of the panel following a diagonal axis (D) by a distance Ld of the effective surface following 1.767*diagonal axis is Ro, and the thickness of the center point of the panel 100 is Tc.

2. The CRT of claim 1, wherein a following condition is satisfied:
 $10\text{mm} \leq T_c \leq 12.4\text{mm}.$

3. The CRT of claim 1, wherein a following condition is satisfied:
 $0.0875 \cdot \ln(U) - 0.4192 \leq \text{OAH}/U \leq 0.0981 \cdot \ln(U) - 0.4753,$ and a tube axis directional distance from the center of the outer surface of the panel to a seal edge line is

OAH.

4. A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a rear side of the panel,

wherein an aspect ratio of an effective surface of the panel is 16:9, a diagonal size of the effective surface is 650mm ~ 760mm, a following condition is satisfied: $-2.1319 \cdot \ln(U) + 14.589 \leq (R_h \cdot R_v \cdot R_o) / U \cdot T_c \leq -2.5462 \cdot \ln(U) + 17.414$,

wherein a value obtained by dividing an inner curvature radius Rx of the effective surface of the panel following a long axis (X) by a distance Lx of the effective surface of the panel following a 1.767*long axis is Rh, a value obtained by dividing an inner curvature radius Ry of the effective surface of the panel following a short axis (Y) by a distance Ly of the effective surface following a 1.767*short axis is Rv, a value obtained by dividing an inner curvature radius of the effective surface of the panel following a diagonal axis (D) by a distance Ld of the effective surface following 1.767*diagonal axis is Ro, and the thickness of the center point of the panel 100 is Tc.

5. The CRT of claim 4, wherein a following condition is satisfied:
 $11\text{mm} \leq T_c \leq 13.4\text{mm}$.

6. The CRT of claim 4, wherein a following condition is satisfied:
 $-0.0567 \cdot \ln(U) + 0.5119 \leq \text{OAH} / U \leq -0.0485 \cdot \ln(U) + 0.4711$, and a tube axis directional distance from the center of the outer surface of the panel to a seal edge line is OAH.

7. A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a rear side of the panel,

wherein an aspect ratio of an effective surface (U) of the panel is 4:3, a diagonal size of the effective surface is 400mm ~ 500mm, and a following condition is satisfied:

$$-0.8629 \cdot \ln(U) + 5.6754 \leq (R_h \cdot R_v \cdot R_o) / U \cdot T_c \leq -1.0547 \cdot \ln(U) + 6.9366,$$

wherein a value obtained by dividing an inner curvature radius Rx of the effective surface of the panel following a long axis (X) by a distance Lx of the effective surface of the panel following a 1.767*long axis is Rh, a value obtained by dividing an inner curvature radius Ry of the effective surface of the panel following a short axis (Y) by a distance Ly of the effective surface following a 1.767*short axis is Rv, a value obtained by dividing an inner curvature radius of the effective surface of the panel following a diagonal axis (D) by a distance Ld of the effective surface following 1.767*diagonal axis is Ro, and the thickness of the center point of the panel 100 is Tc.

8. The CRT of claim 7, wherein a following condition is satisfied:
 $9\text{mm} \leq T_c \leq 11.5\text{mm}.$

9. The CRT of claim 7, wherein a following condition is satisfied:
 $0.096 \cdot \ln(U) - 0.4322 \leq \text{OAH} / U \leq 0.1052 \cdot \ln(U) - 0.4778,$ and a tube axis directional distance from the center of the outer surface of the panel to a seal edge line is OAH.

10. A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a rear side of the panel,

wherein the center transmittance of an effective surface (U) of the panel is 45% ~ 75%, a diagonal size of the effective surface is 650mm ~ 700mm, and a following condition is satisfied:

$$-17.746 \cdot \ln(U) + 116.49 \leq (R_h \cdot R_v \cdot R_o) / U \cdot T_c \leq -20.322 \cdot \ln(U) + 133.45,$$

wherein a value obtained by dividing an inner curvature radius Rx of the effective surface of the panel following a long axis (X) by a distance Lx of the effective surface of the panel following a 1.767*long axis is Rh, a value obtained by dividing an inner curvature radius Ry of the effective surface of the panel following a short axis (Y) by a distance Ly of the effective surface following a 1.767*short axis is Rv, a value obtained by dividing an inner curvature radius of the effective surface of the panel following a diagonal axis (D) by a distance Ld of the effective surface following 1.767*diagonal axis is Ro, and the thickness of the center point of the panel 100 is Tc.

11. The CRT of claim 10, wherein the thickness at the edge portion of the panel is equal to or smaller than 25mm.

12. The CRT of claim 10, wherein a following condition is satisfied:
 $10\text{mm} \leq T_c \leq 13.4\text{mm}.$